Notes Chapter 22 Section 1

Light is an ______________________________. This is a wave that doesn’t need a medium to travel.

An EM wave is a wave that can travel through space or matter and consists of changing ________________ and ________________ fields.

A ____________________ is a region around an object, which exerts a force on another object without actually touching that object.

Why are electromagnetic waves considered transverse waves?

The emission of energy in the form of EM waves is ____________________________.

Figure 2 is a good example showing how light is produced. You may want to add figure 2 to your notes. Make sure to include the 3 steps of light production.
Light waves travel faster in a vacuum. Specifically light travels at ____________________________ in a vacuum.

**Math Break**

The distance from the Earth to the sun is 150,000,000,000 m. How long does it take for light to travel that distance?

Figure 3 shows lightning strike. Why can you see a flash of lightning before you here the rumble of thunder?